



AMENDMENTS TO THE SPECIFICATION

Please rewrite the first full paragraph on page 11, starting at line 3, of the application as follows:

Referring now to Fig. 6, the passivation layer 28 and the oxide layer 30 are further patterned and etched according to conventional techniques. This way, at least one via [[32]] 33 is formed over an exposed surface 34 of copper layer 26 forming bond site 39. The copper bond surface 34 is typically square and has dimensions on the order of 100x100 microns.

Please rewrite the last paragraph on page 12, starting at line 26, of the application as follows:

In another embodiment of the present invention, the copper bond pad surface is passivated by employing a titanium-aluminum (TiAl) barrier layer. Figs. 9-12 illustrate a second embodiment of an improved copper bond structure of the present invention. Fig. 9 shows a thin barrier layer of titanium aluminum (TiAl) 80 deposited within via [[32]] 33 and onto the copper bond surface 34. Titanium-aluminum layer 80 can be deposited by sputtering, using a DC or RF sputtering system. It must be noted, however, that other techniques such as evaporation, CVD, or plating may also be used. The thickness of the titanium aluminum layer 80 is of approximately 50Å to 200Å. Also, as it was explained above with reference to the first embodiment, prior to the formation of the TiAl barrier layer, the wafer may be pretreated or cleaned by using

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either an in-situ or an ex-situ cleaning technique to sputter off any copper oxide formed on the copper surface of the wafer.